



☒ EPA / EPO / OEB
D - 80298 München
089 / 2399 - 0
Tx 523 656 epmu d
Fax 089 / 2399 - 4465

Europäisches
Patentamt

European
Patent Office

Office européen
des brevets

EPA/EPO/OEB · D-80298 München

DEGUSSA AG
Intellectual Property Management
PATENTE und MARKEN
Standort Hanau
Postfach 13 45

63403 Hanau

Nr. der Anmeldung / Application No. / Demande de brevet n

PCT/EP 2005 / 0 0 2 5 5 6

Tag des Eingangs / Date of receipt / Date de réception

10.03.05

Zeichen des Anmelders / Vertreters - Applicant / Representative
ref. No. - Référence du demandeur ou du mandataire

040067 AM

Anmelder / Applicant / Demandeur: DEGUSSA AG

Datum / Date 09.03.2005

Empfangsbescheinigung / Receipt for documents / Récépissé de documents

Das Europäische Patentamt bescheinigt hiermit den Empfang folgender Dokumente :

The European Patent Office hereby acknowledges the receipt of the following :

L'Office européen des brevets accuse réception des documents indiqués ci-dessous :

A. Internationale Anmeldung / International application / Demande internationale

Stückzahl / No. of
copies / Nombre
d'exemplaires

- | | |
|--|---|
| <input checked="" type="checkbox"/> Antrag / Request / Requête | 1 |
| <input checked="" type="checkbox"/> Beschreibung (ohne Sequenzprotokollteil Description (excluding sequence listing part) Description (sauf partie réservée au listage des séquences) | 3 |
| <input checked="" type="checkbox"/> Patentansprüche / Claim(s) / Revendication(s) | 3 |
| <input checked="" type="checkbox"/> Zusammenfassung / Abstract / Abrégé | 3 |
| <input checked="" type="checkbox"/> Zeichnung(en) / Drawing(s) / Dessin(s) | 3 |
| <input checked="" type="checkbox"/> Sequenzprotokollteil der Beschreibung Sequence listing part of description Partie de la description réservée au listage des séquences | 3 |
| <input type="checkbox"/> Beigefügte Unterlagen / Accompanying items / Eléments joints | — |

☒ Kopie der allgemeinen Vollmacht
Copy of general power of attorney (AV 43529)
Copie du pouvoir général

☒ Prioritätsbeleg(e)
Priority document(s) (1 document)
Document(s) de priorité

☐ Gesonderte Angaben zu hinterlegten
Mikroorganismen oder anderem biologischen
Material
Separate indications concerning deposited micro-
organism or other biological material
Indications séparées concernant des micro-
organismes ou autre matériel biologique déposés

☒ Protokoll der Nucleotid- und/oder
Aminosäuresequenzen in computerlesbarer Form
Nucleotide and/or amino acid sequence listing in
computer readable form
Listage des séquences de nucléotides ou d'acides
aminés sous forme déchiffable par ordinateur

☒ Abbuchungsauftrag
Debit order Währung/Currency/Monnaie
Ordre de débit Betrag/Amount/Montant

☐ Scheck
Cheque Ausfüllung freigestellt/
Chèque Optional/facultatif

☒ Sonstige Unterlagen (einzeln auflisten)
Other documents (specify)
Autres documents (préciser)

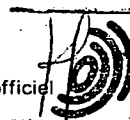
PCT-EASY-Diskette

B. Beigefügte Dokumente / Accompanying documents / Documents joints

- | |
|---|
| <input type="checkbox"/> Blatt für die Gebührenberechnung Fee calculation sheet Feuille de calcul des taxes |
| <input type="checkbox"/> Gesonderte unterzeichnete Vollmacht Separate signed power of attorney Pouvoir distinct signé |

Die genannten Unterlagen sind am oben genannten Tag eingegangen. Die in der Kontrollliste (Feld VIII) des PCT-Antragsformulars RO/101 angegebenen Blattzahlen wurden bei Eingang nicht geprüft. Die Anmeldung hat die ebenfalls oben angeführte Anmeldenummer erhalten / The said items were received on the date indicated above. No check was made on receipt that the number of sheets indicated in the check list (box VIII) of the PCT Request Form RO/101 was correct. The application has been assigned the above-indicated application number / Les documents mentionnés ont été reçus à la date indiquée. L'exactitude du nombre de feuilles indiqué au bordereau (cadre VIII) du formulaire de requête PCT RO/101 n'a pas été contrôlée lors du dépôt. Le numéro figurant ci-dessus a été attribué à la demande de brevet

Unterschrift / Amtsstempel / Signature / Official Stamp / Signature / Cachet officiel



Europäisches Patentamt
European Patent Office
Office européen des brevets
☒ D-80298 München



☑ EPA / EPO / OEB
D - 80298 München
☎ 089 / 2399 - 0
Tx 523 656 epmu d
Fax 089 / 2399 - 4465

Europäisches
Patentamt

European
Patent Office

Office européen
des brevets

EPA/EPO/OEB · D-80298 München

DEGUSSA AG
Intellectual Property Management
PATENTE und MARKEN
Standort Hanau
Postfach 13 45

63403 Hanau

| |
|---|
| Nr. der Anmeldung / Application No. / Demande de brevet n |
| |
| Tag des Eingangs / Date of receipt / Date de réception |
| |
| Zeichen des Anmelders / Vertreters – Applicant / Representative ref. No. – Référence du demandeur ou du mandataire |
| 040067 AM |

Anmelder / Applicant / Demandeur : DEGUSSA AG

Datum / Date 09.03.2005

Empfangsbescheinigung / Receipt for documents / Récépissé de documents

Das Europäische Patentamt bescheinigt hiermit den Empfang folgender Dokumente :

The European Patent Office hereby acknowledges the receipt of the following :

L'Office européen des brevets accuse réception des documents indiqués ci-dessous :

| A. Internationale Anmeldung / International application / Demande internationale | Stückzahl / No. of copies / Nombre d'exemplaires | <input checked="" type="checkbox"/> Kopie der allgemeinen Vollmacht / Copy of general power of attorney (AV 43529) / Copie du pouvoir général |
|--|--|--|
| <input checked="" type="checkbox"/> Antrag / Request / Requête | 1 | <input checked="" type="checkbox"/> Prioritätsbeleg(e) / Priority document(s) (1 document) / Document(s) de priorité |
| <input checked="" type="checkbox"/> Beschreibung (ohne Sequenzprotokollteil) / Description (excluding sequence listing part) / Description (sauf partie réservée au listage des séquences) | 3 | <input type="checkbox"/> Gesonderte Angaben zu hinterlegten Mikroorganismen oder anderem biologischen Material / Separate indications concerning deposited micro-organism or other biological material / Indications séparées concernant des micro-organismes ou autre matériel biologique déposés |
| <input checked="" type="checkbox"/> Patentansprüche / Claim(s) / Revendication(s) | 3 | <input checked="" type="checkbox"/> Protokoll der Nucleotid- und/oder Aminosäuresequenzen in computerlesbarer Form / Nucleotide and/or amino acid sequence listing in computer readable form / Listage des séquences de nucléotides ou d'acides aminés sous forme déchiffable par ordinateur |
| <input checked="" type="checkbox"/> Zusammenfassung / Abstract / Abrégé | 3 | <input checked="" type="checkbox"/> Abbuchungsauftrag / Debit order / Ordre de débit |
| <input checked="" type="checkbox"/> Zeichnung(en) / Drawing(s) / Dessin(s) | 3 | <input type="checkbox"/> Scheck / Cheque / Chèque |
| <input checked="" type="checkbox"/> Sequenzprotokollteil der Beschreibung / Sequence listing part of description / Partie de la description réservée au listage des séquences | 3 | <input checked="" type="checkbox"/> Sonstige Unterlagen (einzeln aufführen) / Other documents (specify) / Autres documents (préciser) |
| <input type="checkbox"/> Beigefügte Unterlagen / Accompanying items / Eléments joints | — | |
| B. Beigefügte Dokumente / Accompanying documents / Documents joints | | |
| <input type="checkbox"/> Blatt für die Gebührenberechnung / Fee calculation sheet / Feuille de calcul des taxes | | |
| <input type="checkbox"/> Gesonderte unterzeichnete Vollmacht / Separate signed power of attorney / Pouvoir distinct signé | | |

Währung/Currency/Monnaie
Betrag/Amount/Montant

EUR 3.408,00

Ausfüllung freigestellt/
Optional/facultatif

PCT-EASY-Diskette

Die genannten Unterlagen sind am oben genannten Tag eingegangen. Die in der Kontrollliste (Feld VIII) des PCT-Antragsformulars RO/101 angegebenen Blattzahlen wurden bei Eingang nicht geprüft. Die Anmeldung hat die ebenfalls oben angeführte Anmeldenummer erhalten / The said items were received on the date indicated above. No check was made on receipt that the number of sheets indicated in the check list (box VIII) of the PCT Request Form RO/101 was correct. The application has been assigned the above-indicated application number / Les documents mentionnés ont été reçus à la date indiquée. L'exactitude du nombre de feuilles indiqué au bordereau (cadre VIII) du formulaire de requête PCT RO/101 n'a pas été contrôlée lors du dépôt. Le numéro figurant ci-dessus a été attribué à la demande de brevet

PCT REQUESTOriginal (for **SUBMISSION**)

| | | |
|----------------|--|---|
| 0 | For receiving Office use only | |
| 0-1 | International Application No. | |
| 0-2 | International Filing Date | |
| 0-3 | Name of receiving Office and "PCT International Application" | |
| 0-4 | Form PCT/RO/101 PCT Request | |
| 0-4-1 | Prepared Using | PCT-SAFE [EASY mode] Version 3.50 (Build 0002.169) |
| 0-5 | Petition The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty | |
| 0-6 | Receiving Office (specified by the applicant) | European Patent Office (EPO) (RO/EP) |
| 0-7 | Applicant's or agent's file reference | 040067 AM |
| I | Title of Invention | NITRILE HYDRATASES FROM METAGENOME LIBRARIES |
| II | Applicant | |
| II-1 | This person is | applicant only |
| II-2 | Applicant for | all designated States except US |
| II-4 | Name | DEGUSSA AG |
| II-5 | Address | Bennigsenplatz 1 40474 Düsseldorf Germany |
| II-6 | State of nationality | DE |
| II-7 | State of residence | DE |
| II-8 | Telephone No. | 0 61 81 / 59-39 24 |
| II-9 | Facsimile No. | 0 61 81 / 59-43 04 |
| III-1 | Applicant and/or inventor | |
| III-1-1 | This person is | applicant and inventor |
| III-1-2 | Applicant for | US only |
| III-1-4 | Name (LAST, First) | VERSECK, Stefan |
| III-1-5 | Address | Alicestrasse 8 63456 Hanau Germany |
| III-1-6 | State of nationality | DE |
| III-1-7 | State of residence | DE |

PCT REQUEST

Original (for SUBMISSION)

| | | |
|--------------|--|--|
| III-2 | Applicant and/or inventor | |
| III-2-1 | This person is | applicant and inventor |
| III-2-2 | Applicant for | US only |
| III-2-4 | Name (LAST, First) | LIEBETON, Klaus |
| III-2-5 | Address | Heinrichstrasse 2a 64673 Zwingenberg Germany |
| III-2-6 | State of nationality | DE |
| III-2-7 | State of residence | DE |
| III-3 | Applicant and/or inventor | |
| III-3-1 | This person is | applicant and inventor |
| III-3-2 | Applicant for | US only |
| III-3-4 | Name (LAST, First) | ECK, Jürgen |
| III-3-5 | Address | Jakobsweg 48 64625 Bensheim Germany |
| III-3-6 | State of nationality | DE |
| III-3-7 | State of residence | DE |
| IV-1 | Agent or common representative; or address for correspondence | |
| | The person identified below is hereby/ has been appointed to act on behalf of the applicant(s) before the competent International Authorities as: | common representative |
| IV-1-1 | Name | DEGUSSA AG |
| IV-1-2 | Address | Intellectual Property Management PATENTE und MARKEN Standort Hanau Postfach 13 45 63403 Hanau Germany |
| IV-1-3 | Telephone No. | 0 61 81 / 59-39 24 |
| IV-1-4 | Facsimile No. | 0 61 81 / 59-43 04 |
| V | DESIGNATIONS | |
| V-1 | The filing of this request constitutes under Rule 4.9(a), the designation of all Contracting States bound by the PCT on the international filing date, for the grant of every kind of protection available and, where applicable, for the grant of both regional and national patents. | |

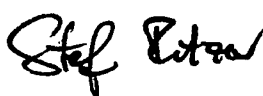
PCT REQUEST

Original (for SUBMISSION)

| | | | |
|--------------|--|--|-----------------------------|
| VI-1 | Priority claim of earlier national application | | |
| VI-1-1 | Filing date | 20 March 2004 (20.03.2004) | |
| VI-1-2 | Number | 10 2004 013 842.7 | |
| VI-1-3 | Country | DE | |
| VII-1 | International Searching Authority Chosen | European Patent Office (EPO) (ISA/EP) | |
| VIII | Declarations | Number of declarations | |
| VIII-1 | Declaration as to the identity of the inventor | - | |
| VIII-2 | Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent | - | |
| VIII-3 | Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application | - | |
| VIII-4 | Declaration of inventorship (only for the purposes of the designation of the United States of America) | - | |
| VIII-5 | Declaration as to non-prejudicial disclosures or exceptions to lack of novelty | - | |
| IX | Check list | number of sheets | electronic file(s) attached |
| IX-1 | Request (including declaration sheets) | 4 | |
| IX-2 | Description (excluding sequence listing part) | 32 | - |
| IX-3 | Claims | 3 | - |
| IX-4 | Abstract | 1 | |
| IX-5 | Drawings | 7 | - |
| IX-7a | Sub-total number of sheets | 47 | |
| IX-6a | Sequence listing part of description | 75 | - |
| IX-7 | TOTAL | 122 | |

PCT REQUEST

Original (for SUBMISSION)

| | Accompanying Items | paper document(s) attached | electronic file(s) attached |
|-------------------|--|--|-----------------------------|
| IX-8 | Fee calculation sheet | | - |
| IX-11 | Copy of general power of attorney | reference no. AV 43529 | - |
| IX-13 | Priority document(s) | Item(s) VI-1 | - |
| IX-16(A) | Sequence listing in computer readable form | | |
| IX-16(A) - (i) | copy submitted for the purposes of international search under Rule 13ter only (and not as part of the international application) | - | 1 Diskette |
| IX-17 | PCT-SAFE physical media | - | |
| IX-19 | Figure of the drawings which should accompany the abstract | 7 | |
| IX-20 | Language of filing of the international application | English | |
| X-1 | Signature of applicant, agent or common representative |  | |
| X-1-1 | Name | DEGUSSA AG | |
| X-1-2 | Name of signatory | i. V. Dr. Stefan Retzow | |
| X-1-3 | Capacity | AV 43529 | |

FOR RECEIVING OFFICE USE ONLY


| | | |
|--------|---|--------|
| 10-1 | Date of actual receipt of the purported international application | |
| 10-2 | Drawings: | |
| 10-2-1 | Received | |
| 10-2-2 | Not received | |
| 10-3 | Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application | |
| 10-4 | Date of timely receipt of the required corrections under PCT Article 11(2) | |
| 10-5 | International Searching Authority | ISA/EP |
| 10-6 | Transmittal of search copy delayed until search fee is paid | |

FOR INTERNATIONAL BUREAU USE ONLY

| | | |
|------|--|--|
| 11-1 | Date of receipt of the record copy by the International Bureau | |
|------|--|--|

PCT (ANNEX - FEE CALCULATION SHEET)Original (for **SUBMISSION**)

(This sheet is not part of and does not count as a sheet of the international application)

| | | | |
|--------------|--|--|---------------------|
| 0 | For receiving Office use only | | |
| 0-1 | International Application No. | | |
| 0-2 | Date stamp of the receiving Office | | |
| 0-4 | Form PCT/RO/101 (Annex) | | |
| 0-4-1 | PCT Fee Calculation Sheet Prepared Using | PCT-SAFE [EASY mode] Version 3.50 (Build 0002.169) | |
| 0-9 | Applicant's or agent's file reference | | 040067 AM |
| 2 | Applicant | | DEGUSSA AG |
| 12 | Calculation of prescribed fees | fee amount/multiplier | Total amounts (EUR) |
| 12-1 | Transmittal fee T | | 100 |
| 12-2-1 | Search fee S | | 1550 |
| 12-2-2 | International search to be carried out by | EP | |
| 12-3 | International filing fee (first 30 sheets) I1 | 902 | |
| 12-4 | Remaining sheets | 92 | |
| 12-5 | Additional amount (X) I2 | 10 | |
| 12-6 | Total additional amount | 920 | |
| 12-7 | I1 + I2 = | 1822 | |
| 12-12 | EASY Filing reduction R | -64 | |
| 12-13 | Total International filing fee (I-R) I | | 1758 |
| 12-14 | Fee for priority document | | |
| | Number of priority documents requested | 0 | |
| 12-15 | Fee per document (X) P | 30 | |
| 12-16 | Total priority document fee: | | |
| 12-17 | TOTAL FEES PAYABLE (T+S+I+P) | | 3408 |
| 12-19 | Mode of payment | authorization to charge deposit account | |
| 12-20 | Deposit account instructions | | |
| | The receiving Office | European Patent Office (EPO) (RO/EP) | |
| 12-20-1 | Authorization to charge the total fees indicated above | | |
| 12-20-2 | Authorization to charge any deficiency or credit any overpayment in the total fees indicated above | | |
| 12-21 | Deposit account No. | 28000215 | |
| 12-22 | Date | 09 March 2005 (09.03.2005) | |
| 12-23 | Name and signature | DEGUSSA AG i. V. Dr. Stefan Retzow (AV 43529)  | |

The present invention is concerned with the preparation of novel nitrile hydratases. These latter are preferably obtained from nonculturable organisms by means of a PCR-based screening, in metagenome DNA libraries, using special degenerate primers.

PCT

Original (for SUBMISSION)

| | | |
|--------|--------------------------------|--|
| 13-2-8 | Validation messages Fees | Green? Please confirm that fee schedule utilized is the latest available |
| 13-2-9 | Validation messages Payment | Green? Please ensure that you have a valid deposit account with the receiving Office selected. |



Prioritätsbescheinigung über die Einreichung einer Patentanmeldung

Aktenzeichen: 10 2004 013 842.7

Anmeldetag: 20. März 2004

Anmelder/Inhaber: Degussa AG, 40474 Düsseldorf/DE

Bezeichnung: Nitrilhydratasen aus Metagenombibliotheken

IPC: C 12 N 9/88

Die angehefteten Stücke sind eine richtige und genaue Wiedergabe der ursprünglichen Unterlagen dieser Patentanmeldung.

München, den 23. Februar 2005
Deutsches Patent- und Markenamt
Der Präsident
Im Auftrag


Werner

1 **ALLGEMEINE VOLLMACHT**
GENERAL AUTHORISATION
POUVOIR GENERAL

Nr. der allgemeinen Vollmacht / General Authorisation No.
N° du pouvoir général

43529

2 Ich (Wir) / I (We) / Je (Nous)

Degussa AG
Bennigsenplatz 1
D-40474 Düsseldorf

Herrn
Dr. Stefan Retzow
Degussa AG
Intellectual Property Management
Patente und Marken
Standort Wolfgang
Postfach 1345
D-63403 Hanau

3 bevollmächtigte(n) hiermit / do hereby authorise / autorise (autorisons) par la présente

Herrn
Dr. Stefan Retzow
European Patent Attorney
Zustellungsanschrift:

Degussa AG
Intellectual Property Management
Patente und Marken
Standort Wolfgang
Postfach 1345
D-63403 Hanau

4 mich (uns) in den durch das Europäische Patentübereinkommen geschaffenen Verfahren in allen meinen (unseren) Patentangelegenheiten zu vertreten,
alle Handlungen für mich (uns) vorzunehmen und Zahlungen für mich (uns) in Empfang zu nehmen,
to represent me (us) in all proceedings established by the European Patent Convention and to act for me (us) in all patent transactions and to receive
payments on my (our) behalf.

A me (nous) représenter pour ce qui concerne toutes mes (nos) affaires de brevet dans toute procédure instituée par la Convention sur le brevet européen
et, à ce titre, à agir en mon (notre) nom et à recevoir des paiements pour mon (notre) compte.

☒ Die Vollmacht gilt auch für Verfahren nach dem Vertrag über die internationale Zusammenarbeit auf dem Gebiet des Patentwesens.
This authorisation shall also apply to the same extent to any proceedings established by the Patent Cooperation Treaty.
Ce pouvoir s'applique également à toute procédure instituée par le Traité de coopération en matière de brevets.

☐ Weitere Vertreter sind auf einem gesonderten Blatt angegeben. / Additional representatives indicated on supplementary sheet.
Les autres mandataires sont mentionnés sur une feuille supplémentaire.

5 ☒ Untervollmacht kann erteilt werden. / Sub-authorisation may be given. / Le pouvoir pourra être délégué.

6 ☒ Bitte die gelbe Kopie, ergänzt um die Nr. der allgemeinen Vollmacht, an den Vollmachtgeber zurücksenden.
Please return the yellow copy, supplemented by the General Authorisation No., to the authorisor.
Prière de renvoyer la copie jaune au mandant, munie du n° du pouvoir général.

Ort / Place / Lieu Hanau

Datum / Date 26.03.2001

Unterschrift(en) / Signature(s)

Degussa AG
ppa.
Dr. Matthias Schäfer
Prokurist

ppa.
Dr. Wolfgang Weber
Prokurist

7 Das Formblatt muß vom (von den) Vollmachtgeber(n) (bei juristischen Personen vom Unterschriftsberechtigten) eigenhändig unterzeichnet sein. Nach der Unterschrift bitte den
(die) Namen des (der) Unterzeichneten mit Schreibmaschine wiederholen. (bei juristischen Personen die Stellung des Unterschriftsberechtigten innerhalb der Gesellschaft
angeben).

The form must bear the personal signature(s) of the authorisor(s) (in the case of legal persons, that of the officer empowered to sign). After the signature, please type the name(s)
of the signatory(ies) adding, in the case of legal persons, his (their) position within the company.

Le formulaire doit être signé de la propre main du (des) mandant(s) (dans le cas de personnes morales, de la personne ayant qualité pour signer). Veuillez ajouter à la machine,
après la signature, le (les) nom(s) du (des) signataire(s) en mentionnant, dans le cas de personnes morales, ses (leurs) fonctions au sein de la société.